JC10 Rec'd PCT/PTO 2.5 FFR 2002

ATTORNEY'S DOCKET NUMBER Form PTO-1390U S DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE 0702-020319 TRANSMITTAL LETTER TO THE UNITED STATES U S APPLICATION NO (15 known, see 37 CFR 1 5) DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371 PRIORITY DATES CLAIMED INTERNATIONAL FILING DATE INTERNATIONAL APPLICATION NO 26.08.99 (26 August 1999) 18.08.00 (18 August 2000) PCT/NL00/00576 ISSUING COMPUTER, ADMISSION CONTROL SYSTEM AND METHOD FOR TITLE OF INVENTION GRANTING ADMISSION TO AN EVENT APPLICANT(S) FOR DO/EO/US Johan P. EILANDER and Hendrikus M. SMIT Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items 1. This is a FIRST submission of items concerning a filing under 35 U S C 371 2. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U S C 371. 3. This express request to begin national examination procedures (35 U S C 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U S C. 371(b) and PCT Articles 22 and 39(1). 4. A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. 5. 🖾 A copy of the International Application as filed (35 U S C 371(c)(2)) a \square is transmitted herewith (required only if not transmitted by the International Bureau) b Anas been transmitted by the International Bureau c. \square is not required, as the application was filed in the United States Receiving Office (RO/US) 6. A translation of the International Application into English (35 U S C 371(c)(2)). 7. Amendments to the claims of the International Application under PCT Article 19 (35 U S C 371(c)(3)) a. \Box are transmitted herewith (required only if not transmitted by the International Bureau) b have been transmitted by the International Bureau c \square have not been made; however, the time limit for making such amendments has NOT expired d have not been made and will not be made 8. A translation of the amendments to the claims under PCT Article 19 (35 U S C 371(c)(3)) 9. An oath or declaration of the inventor(s) (35 U.S C 371(c)(4)). 10. A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U S C 371(c)(5)). Items 11. to 16. below concern document(s) or information included: 11. An Information Disclosure Statement under 37 CFR 1 97 and 1 98. 12. An assignment document for recording A separate cover sheet in compliance with 37 CFR 3 28 and 3.31 is included 13. A FIRST preliminary amendment. ☐ A SECOND or SUBSEQUENT preliminary amendment. 14 A substitute specification 15 A change of power of attorney and/or address letter 16. Other items or information a. WO 01/15089-Front Page, Specification, Claims and Drawings (21 pp) b. International Search Report (3 pp.)

U.S. APPLICATION NO.	U.S. APPLICATION NO (If known, see 37 CFR 15) 4 7 0 INTERNATIONAL APPLICATION NO PCT/NL00/00576		ATTORNEY'S DOCKET NUMBER 0702-020319		
17. The following fees are submitted BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):				CALCULATIONS PTO USE ONLY	
	prepared by the EPO or JPO				
No international prelimi					
but international search					
	liminary examination fee (37 CFR 1 48 (37 CFR 1 445(a)(2)) paid to USPTO				
International preliminary and all claims satisfied p					
ENTER APPROP	RIATE BASIC FEE AM	OUNT =		\$ 890.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than 20 🛮 30 months from the earliest claimed priority date (37 CFR 1 492(e))				\$ 130.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	21 - 20	1	X \$18.00	\$ 18.00	
Independent claims	3 - 3 =	0	X \$84.00	\$ 0.00	
MULTIPLE DEPENDENT	CLAIM(S) (if applicable)		+ \$280.00	\$ 0.00	
TOTAL	TOTAL OF ABOVE CALCULATIONS =				
Reduction of 1/2 for filing by small entity, if applicable				\$ 0.00	
SUBTOTAL =				\$ 1038.00	
Processing fee of \$130.00 for furnishing the English translation later than 20 30 months from the earliest claimed priority date (37 CFR 1 492(f)) +				\$ 0.00	
TOTAL NATIONAL FEE =				\$ 1038.00	
Fee for recording the enclos cover sheet (37 CFR 3 28, 3	ed assignment (37 CFR 1.21(h)). The 31) \$40.00 per proper		by an appropriate	\$ 0.00	
TOTAL FEES EN	CLOSED =			\$ 1038.00	
				Amount to be: Refunded	\$
				Charged	\$
 b. ☐ Please charge my Do A duplicate copy of the Adupticate copy of the Common Deposit Account No. NOTE: Where an appropand granted to rest SEND ALL CORRESPONI Richard L. Byrne 700 Koppers Building 436 Seventh Avenue Pittsburgh, Pennsylva Telephone: (412) 47 	nssioner is hereby authorized to charge 23-0650 A duplicate copy of this riate time limit under 37 CFR 1.494 ore the application to pending status DENCE TO g unia 15219-1818 1-8815	any additional fees which may be sheet is enclosed or 1.495 has not been met, a per SIGNAT Richa NAME	e required, or credit a cition to revive (37 december 2017) URE and L. Byrne		
Facsimile: (412) 471			RATION NUMBEI	R	

PATENT APPLICATION/PCT Attorney Docket No. 702-020319

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

:

Johan P. EILANDER

ISSUING COMPUTER, ADMISSION

Hendrikus M. SMIT

CONTROL SYSTEM AND METHOD FOR GRANTING ADMISSION TO AN EVENT

International Application

No. PCT/NL00/00576

:

International Filing Date

:

18 August 2000

Priority Date Claimed

٠

26 August 1999

:

Serial No. Not Yet Assigned

Filed Concurrently Herewith

Pittsburgh, Pennsylvania February 25, 2002

PRELIMINARY AMENDMENT

Box PCT Commissioner for Patents Washington, D.C. 20231

Sir:

Prior to initial examination, please amend the above-identified patent application as follows:

IN THE SPECIFICATION:

On page 1, after the title, please insert the following section headings:

BACKGROUND OF THE INVENTION

1. Field of the Invention

Before the paragraph beginning at page 1, line 14, please insert the following section heading:

2. <u>Description of the Related Art</u>

Before the paragraph beginning at page 2, line 14, please insert the following section heading:

SUMMARY OF THE INVENTION

Before the paragraph beginning at page 5, line 24, please insert the following section heading:

BRIEF DESCRIPTION OF THE DRAWINGS

Before the paragraph beginning at page 6, line 7, please insert the following section heading:

DETAILED DESCRIPTION OF THE PREFERED EMBODIMENTS

IN THE CLAIMS:

Please cancel pending claims 1-22 and rewrite them as new claims 23-43 as follows:

- 23. A method for granting admission to an event, wherein an admission code is issued to a consumer via a distribution channel, which admission code is in accordance with a predetermined format and which forms part of a set of admission codes, which set of admission codes forms a predetermined random or pseudo-random subset of all codes having the predetermined format, wherein it is checked at the entrance to the event whether a code presented by a consumer is part of the set of admission codes.
- 24. The method according to claim 23, wherein the code is placed on a carrier after receipt by the consumer.
- 25. The method according to claim 24, wherein said code is placed on said carrier by means of a printer.

- 26. The method according to claim 23, wherein said code comprises a bar code.
- 27. The method according to claim 23, wherein said distribution channel comprises the Internet.
- 28. The method according to claim 23, wherein the event is part of the set consisting of a sports event, a concert, a day in an amusement park, a cinema show, a theatre show, a fair, a symposium, a boat trip, a rail journey, a bus journey or a flight.
- 29. The method according to claim 23, wherein an entrance gate is unlocked or locked in dependence on the result of the check.
- 30. The method according to claim 23, wherein the presented code is input into the admission computer at the entrance to the event by means of an input apparatus.
- 31. The method according to claim 30, wherein said input apparatus is an optical scanner.
- 32. The method according to claim 23, wherein the check at the entrance is carried out by the admission computer, which carries out a logic operation on the presented code, the result of which logic operation is compared with a predetermined set of results stored in the memory of the computer.
- 33. The method according to claim 32, wherein said result comprises an identification of an entrance gate and/or an admission date and/or an admission time segment and/or a seat number and/or a serial number.
- 34. The method according to claim 32, wherein the issuing computer processes can selectively carry out the comparison between the result and the set of predetermined results on part of the result.
- 35. The method according to claim 32, wherein said routine for the logic operation is changed periodically.

- 36. The method according to claim 32, wherein the admission code is determined upon being issued by an issuing computer by retrieving a result from said predetermined set of results and to subject said result to the inverse of the logic operation that will be used at the moment of admission.
- 37. The method according to claim 36, wherein the issuing computer processes a result into an admission code only once.
- 38. The method according to claim 23, wherein at least one characteristic part of the presented admission code and/or the associated result, for example, the serial number, is stored in a memory of the admission computer, and said admission code is then excluded from admission.
- 39. An admission control system for granting admission to an event, comprising an admission computer, which includes means for checking whether an input code is part of a set of admission codes, which set of admission codes forms a predetermined random or pseudo-random subset of all codes having a predetermined format.
- 40. The admission control system according to claim 39, wherein said admission computer includes means which are capable of carrying out a logic operation on the input code, and of comparing the result thereof with a predetermined set of results stored in the memory of the computer.
- 41. The admission control system according to claim 39, furthermore comprising at least one entrance gate, which can be unlocked or locked in dependence on the result of the check.
- 42. An issuing computer intended for granting admission to an event, including means that verify whether the admission code is in accordance with a predetermined format and forms an element of a set of admission codes, which set of

10769470,068703

admission codes forms a predetermined random or pseudo-random subset of all codes having

said predetermined format.

43. The issuing computer according to claim 42, furthermore including

means which are capable of determining the admission code by retrieving a result from a

predetermined set of results and to subject said result to the inverse of the logic operation that

can be used at the moment of admission by an admission control system admission code

according to claim 40.

IN THE ABSTRACT:

After the claims, please insert a page containing the Abstract Of The

Disclosure, which is attached hereto as a separately typed page.

REMARKS

The specification and claim amendments have been made in order to conform

this patent application to customary United States patent practice.

Attached hereto is a marked-up version of the changes made to the

specification by the current amendment. The attachment is captioned "VERSION WITH

MARKINGS TO SHOW CHANGES MADE".

Examination and allowance of pending claims 23-43 are respectfully

requested.

Respectfully submitted,

WEBB ZIESENHEIM LOGSDON

-ORKIN & HANSON, P.C.

Richard L. Byrne

Registration No. 28,498

Attorney for Applicants

700 Koppers Building

436 Seventh Avenue

Pittsburgh, PA 15219-1818

Telephone: 412-471-8815

Facsimile: 412-471-4094

ISSUING COMPUTER, ADMISSION CONTROL SYSTEM AND METHOD FOR GRANTING ADMISSION TO AN EVENT

ABSTRACT OF THE DISCLOSURE

A method for granting admission to an event, wherein an admission code is issued to a consumer via a distribution channel, which admission code is in accordance with a predetermined format and which forms part of a set of admission codes, which set of admission codes forms a predetermined random or pseudorandom subset of all codes having the predetermined format, wherein it is checked at the entrance to the event whether a code presented by a consumer is part of the set of admission codes.

WO 01/15089

ISSUING COMPUTER, ADMISSION CONTROL SYSTEM AND METHOD FOR GRANTING ADMISSION TO AN EVENT

The present invention relates to a method for granting admission to an event, wherein an admission code is issued to a consumer via a distribution channel, which admission code has a predetermined format and which forms part of a set of admission codes. A code having a predetermined format may for example be a number or an alphanumeric sequence comprising a predetermined number of positions. It is noted that in this connection the term event is understood to refer to a trip as well.

A method of this kind is known, for example in connection with the granting of admission to aeroplanes 15 as used, among others, by the British airline EasyJet Airlines Company. A consumer can thereby order a ticket via the Internet and pay with a credit card, for example, whereby an admission code consisting of for example 6 alphanumeric characters is transmitted, 20 likewise via the Internet, which code can be printed out by the consumer on his printer. The passenger must show this admission code at the gate to the aeroplane, where this code is compared with the list of codes that have been issued. If the code being presented is included in 25 the list and the name on the passenger's passport moreover corresponds with the name on the list, the passenger is granted admission to the aeroplane.

The drawback of this prior art method is the fact that a current and complete list of all admission codes that have been given out must be available at the gate to the aeroplane, which makes it necessary either to have an on-line connection with the issuing computer at the gate to the aeroplane or to stop the issuing admission codes well in advance and transmit the admission codes that have been granted to the memory of the computer that is present at the gate to the aeroplane. Moreover, the risk

entrance.

30

35

of fraud resulting from the fact that a series of consecutive admission codes is issued is so large that a laborious additional check, such as passport control, is necessary when such a method is used. A method of this kind is furthermore not very suitable for events where it is not customary to present an identity card at the

The object of the invention is to provide an

10 inexpensive, quick, simple and efficient method of
granting admission to an event, wherein the risk of
fraud is minimized and additional checks are not
necessary.

15 According to the inventive method, the set of admission codes is to that end made up of a predetermined random or pseudo-random subset of all codes having the predetermined format, wherein it is checked at the entrance to the event and/or the journey whether a code 20 presented by a consumer is part of the set of admission codes. According to the invention, said set of admission codes need not represent the actually issued admission codes, but the entire set may comprise predetermined admission codes, irrespective of the fact whether they 25 have actually been issued or not.

If the subset of admission codes is sufficiently small in comparison with the complete set of all codes having the prescribed format, and it is at the same time ensured that the set of admission codes does not constitute an obvious sequence (in other words, a random or pseudo-random sequence), the risk of someone conceiving and presenting a code that is part of the set of admission codes is very small, viz. in the order of the proportion between the number of elements of the subset and the complete set. It is simple, therefore, to make this proportion very small by giving the admission

20

25

35

3

code a format of for example 20 alphanumeric characters, which, given a maximum number of admission codes of for example 100,000, gives more than 10³¹ possible codes, and to ensure that the set of admission codes constitutes a maximally random subset of the complete set.

Preferably, the code is placed on a carrier, preferably by means of a printer, after receipt by the consumer. Preferably the code comprises a bar code, which represents for example the aforesaid alphanumeric sequence. Preferably, the distribution channel is the Internet. The above preferred embodiments ensure that the issuing of codes takes place in a consumer-friendly, simple and quick manner, which codes can subsequently be subjected to a check in a simple manner.

The invention is especially advantageous if the event is a sports event, a concert, a day in an amusement park, a cinema show, a theatre show, a fair, a symposium, a boat trip, a rail journey, a bus journey or a flight.

Preferably, an entrance gate is unlocked or locked in dependence on the result of the check. This can take place automatically, for example, if the entrance gate is connected to an admission computer that does the checking.

At the entrance to the event the presented code is preferably input into the admission computer by means of an input apparatus, preferably an optical scanner, which admission computer carries out the check at the entrance by subjecting the presented code to a logic operation, the result of which is compared with a predetermined set of results that is stored in the memory of the admission computer.

The advantage of this method, wherein it is not the

codes themselves that are checked but rather the results of an operation carried out thereon, for example one or more known cryptologic operations, is that the results themselves may constitute a consecutive, non-random sequence, which may include all kinds of information about the event, preferably an identification of an entrance gate where the consumer must present the code, an admission date, an admission time segment, a seat number and/or a serial number. The admission computer can thereby selectively carry out the comparison between the result and the set of predetermined results on part of the result, so that for example the check with regard to the entrance gate number or the date and/or the time

15 circumstances.

Preferably the routine for the logic operation is changed periodically. This discourages possible frauds from deriving the routine for the logic operation by means of protracted analysis of the issued admission codes.

can be omitted as desired if there are special

Preferably, the admission code is determined upon being issued by an issuing computer by retrieving a result from said predetermined set of results and to subject the result to the inverse of the logic operation that will be used at the moment of admission, wherein the issuing computer preferably processes a result into an admission code only once.

30

35

20

25

10

As already said before, the set of results may be a consecutive sequence, for example consisting of an entrance gate number, a date, a period and a serial number. By subjecting, at the issuing moment, the admission code to the inverse of the operation that will be carried out on the admission code at the respective entrance gate number, on the specific date, in the

specific period, the correct admission code that will grant admission to the event under those conditions will be obtained. In that case the only data that need to be programmed into the admission computer in advance in order to enable the check are the entrance gate number, the date, the period and the operation routine, and not the (issued) serial numbers, therefore.

Preferably, in order to prevent the same admission code

10 being used a second time, at least one characteristic
part of the presented admission code and/or the
associated result, for example the serial number, is
stored in a memory of the admission computer, and said
admission code is then excluded from admission.

15

The invention also relates to an admission control system and to an issuing computer for implementing the method according to the invention.

20 The invention furthermore relates to a carrier on which an admission code has been placed by means of the method according to the invention.

The invention will now be explained in more detail with respect to the figures, which show an exemplary embodiment of the invention, merely for the purpose of illustration.

Figure 1 is a schematic representation of the Internet, 30 to which an issuing computer and a home computer are connected;

Figure 2 is a schematic representation of a subset of admission codes;

35

Figure 3 is a schematic representation of another subset of admission codes;

35

6

Figure 4 is a schematic representation of a logic operation, to which a subset of codes is subjected; and

Figure 5 is a schematic representation of an admission control system.

Figure 1 schematically shows a computer network, the Internet in this case, to which a server is permanently connected, which server functions as an issuing computer 2 for admission codes by means of which admission to one or more events can be obtained. When a consumer wishes to visit one of said events, he can contact the Internet 1 via his home computer by means of a modem, and input the Internet address (URL) of the server in question into his browser. His computer screen will then display a web page on which the various events are being offered.

The consumer can state his selection and also indicate

certain preferences, such as the number of persons, the
date, the time, the circle, etc. Then the total sum of
the transaction will be displayed, which can
subsequently be paid by the consumer, for example by
means of a credit card or a coupon system, whereby a

protected transmission procedure is used.

Once this has been done, the transaction is completed in that an admission code is sent to the consumer's home computer 3 by the issuing computer 2, which admission code, in this embodiment in the form of a bar code representing an alphanumeric sequence of twenty characters, is displayed on the screen. The sending of the admission code likewise takes place in a protected manner. Optionally, if the consumer states an e-mail address, the admission code is also transmitted by protected e-mail, so that the admission code will not be lost in the unhoped-for event that the web page should

prematurely disappear from the screen.

Then the consumer can print out the admission code, in the form of a bar code, on his own printer 4, whereby it is also possible to print additional information, such as the date, the starting time and the end time of the period during which the consumer must check in, a possible number of the entrance gate at which he must check in, as well as a possible seat number, as a result of which an admission ticket comprising a unique admission code is created, as it were. If several admission codes have been purchased simultaneously for different events, or for several persons, these codes can be printed in a corresponding manner.

15

Now the procedure used for issuing the admission codes will be explained with reference to Figures 2, 3 and 4. As already discussed before, an admission code as used in the present embodiment consists of 20 alphanumeric characters. Sets 10, 20 2@ present all possible codes that consist of 20 alphanumeric characters, the so-called format that is prescribed for a code. Subsets 11, 21 represent the set of admission codes that can be issued for a specific event, and thus also determine the maximum number of consumers that can visit the event.

25

With the prior art method of issuing admission codes via the Internet as described in the introduction, the admission codes constitute a continuous, non-random subset 11 of a complete set 10, for example in that the code is incremented by one with Etach new code that is to be issued. It is quite simple thereby to predict a next admission code once one or a few admission codes are known. When such a method is used, it is therefore necessary to check at the entrance whether the admission code in question has in actual fact been issued, and also to check Ity means of an identity card whether the correct person is checking in with said admission code, in order to prevent a forger being granted admission with an admission code that has

WO 01/15089 PCT/NL00/00576

Я

been issued to someone else. Consequently, a current list of actually issued admission codes and the associated names of consumers needs to be available at the entrance to the event.

The need for the above-described laborious additional protection can be obviated, as schematically shown in Figure 3, by making sure that it is not possible to predict an admission code on the basis of one or more other admission codes, in other words, that the admission codes are determined in a Mandom or semi-random fashion, and furthermore ensuring that the subset of admission codes 21 is so small in comparison with the complete set 20 that the risk that a code that has been selected at random is an admission code is very small. With a format of 20 alphanumeric characters (36 possible characters Mar each position, A .. Z, O .. 9) the complete set 10, 20 consists of 1.34 x 10³¹ codes, so that, given a maximum number of visitors of 100,000, the chance of a potential forger finding the correct admission code by a chance is only 1 : 1.34 x 10³¹ per attempt.

20

Referring to Figure 4, a specific procedure is used for determining a pseudo-random subset of admission codes 21. The starting point is a subset of "results" 31. The term results will be explained hereafter. In the embodiment said results 31 2 Ere composed of an entrance gate number, an admission date, an admission time segment, a serial number and four filter codes. Overall said result comprises 15 characters. Results 31 constitute a non-random subset 31 of a complete set 30. Upon issue of the admission codes as described with reference to FO igure 1, a first result is retrieved from the memory of issuing computer 2 and at the same time blocked for a next issue.

Then the result is converted into a pseudo-random admission 350de, as indicated by the arrows in Figure 4, by means of a logic operation, which consists of various steps in accordance with a specific routine, which depends on the entrance

gate/admission date/admission time segment combination. The operation routine may comprise a well-known technique from the field of cryptology.

En the embodiment, the operation routine successively comprises the changing of positions of characters (for example the first character to the third position, the second character to the eleventh position, the third character to the second position, etc.), and the substitution of characters (for example A for Y, RO for Z, C for 1, D for 2, etc.). The first two filter codes must be used thereby in order to determine which changing step and which substitution step are to be used. Then an alphanumerical check number consisting of five characters is determined from the obtained code, with which the original result is extended to a total of twenty characters. Following that, another changing step and another substitution step are carried out, which are determined by the third and fourth filter codes. Since there are four filter codes, 364 (over 1.4 million) different operation routines are possible, which Provides adequate protection against the system being hacked.

Thus a pseudo-random admission code is obtained, which is transmitted to the consumer's home computer via the Internet and which can be printed out by the consumer.

25

Pseudo-random means that statistically the subset of admission codes 21, which is obtained by subjecting all elements of subset 31 to the logic operation, is hardly distinguishable, if at all, from a truly random subset, in spite of being derived 3from a non-random set.

The consumer subsequently checks in with his printed code at the indicated entrance gate in the indicated time segment. Figure 5 shows an admission control system, which consists of æm admission computer 40, which is connected to a number of entrance gates 41. Stored in the memory of admission computer 40 is an associated operation routine for every entrance

gate/admission date/admission time segment combination that is possible. Consequently, there is no need for the admission codes themselves or the actually issued admission codes or the original serial numbers that form the basis thereof to be stored in the memory.

The operation routine that is used is the inverse of the operation routine that has been used by the computer when issuing admission codes for this entrance gate/admission thate/admission time segment combination.

The consumer holds his code, which is printed in the form of a bar code, before an optical scanner 42, as a result of which the code is read into the memory of admission computer 40. Then the code that has been read is subjected to the operation routine, which is valid for the entrance gate in question at that point in time. Since this operation routine is the inverse of the operation routine by means of which the original result was converted into an admission code by the issuing computer, 20th follows that the computer will convert the presented code into a "result" consisting of, among other things, an entrance gate number, an admission date and an admission time segment.

If the above three data tally with the facts that apply at that amount, it is established that the code being presented is an admission code, and the consumer is granted admission. The check as regards the gate number, for example, can be selectively deactivated, for example when an entrance gate is defective and it is necessary to use an entrance gate other amount the originally intended one. The serial number, which is also included in the result, is stored in the memory of the admission computer after the check has been carried out, thus making it possible to check whether admission has been granted on the basis of an admission code before already. This makes it amount to prevent two people being granted admission on the basis of an admission code they have copied from each other. By including this protection message in the transmission and

having it printed out upon issue of the admission code, the copying of admission codes is discouraged, and the consumer is warned not to show his code to strangers lest it be copied.

Office it has been established that a presented code is an admission code and admission has not been granted before, a barrier 43 connected to the admission computer 40, for example a turnstile, is unlocked, thus granting the consumer admission to the event.

CLAIMS

15

30

- 1. A method for granting admission to an event, wherein an admission code is issued to a consumer via a distribution
- channel, which admission code is in accordance with a predetermined format and which forms part of a set of admission codes, which set of admission codes forms a predetermined random or pseudo-random subset of all codes having the predetermined format, wherein it is checked at
- the entrance to the event whether a code presented by a consumer is part of the set of admission codes.
- 2. A method according to claim 1, wherein the code is placed on a carrier after receipt by the consumer.
- 3. A method according to claim 2, wherein said code is placed on said carrier by means of a printer.
- 4. A method according to claim 1, 2 or 3, wherein said code comprises a bar code.
- 5. A method according to any one of the preceding claims, wherein said distribution channel comprises the Internet.
- A method according to any one of the preceding claims, wherein the event is part of the set consisting of a sports event, a concert, a day in an amusement park, a cinema show, a theatre show, a fair, a symposium, a boat trip, a rail journey, a bus journey or a flight.
- 7. A method according to any one of the preceding claims, wherein an entrance gate is unlocked or locked in dependence on the result of the check.
- A method according to any one of the preceding claims, wherein the presented code is input into the admission computer at the entrance to the event by means of an input

5

13

apparatus.

- 9. A method according to claim 8, wherein said input apparatus is an optical scanner.
- 10. A method according to any one of the preceding claims, wherein the check at the entrance is carried out by the admission computer, which carries out a logic operation on the presented code, the result of which logic operation is
- 10 compared with a predetermined set of results stored in the memory of the computer.
- 11. A method according to claim 10, wherein said result comprises an identification of an entrance gate and/or an
- admission date and/or an admission time segment and/or a seat number and/or a serial number.
- 12. A method according to claim 10 or 11, wherein the issuing computer processes can selectively carry out the
- comparison between the result and the set of predetermined results on part of the result.
- 13. A method according to claim 10, 11 or 12, wherein said routine for the logic operation is changed periodically.
- 25
 14. A method according to any one of the claims 10 13, wherein the admission code is determined upon being issued by an issuing computer by retrieving a result from said predetermined set of results and to subject said result to
- the inverse of the logic operation that will be used at the moment of admission.
- 15. A method according to claim 14, wherein the issuing computer processes a result into an admission code only
- 35 once.
- 16. A method according to any one of the preceding claims,

wherein at least one characteristic part of the presented admission code and/or the associated result, for example the serial number, is stored in a memory of the admission computer, and said admission code is then excluded from

- 5 admission.
- 17. An admission control system for implementing the method according to any one of the preceding claims, comprising an admission computer, which includes means for checking
- whether an input code is part of a set of admission codes, which set of admission codes forms a predetermined random or pseudo-random subset of all codes having a predetermined format.
- 113. An admission control system according to claim 17, wherein said admission computer includes means which are capable of carrying out a logic operation on the input code, and of comparing the result thereof with a predetermined set of results stored in the memory of the computer.

20

19. An admission control system according to claim 17 or 18, furthermore comprising at least one entrance gate, which can be unlocked or locked in dependence on the result of the check.

25

- 20. An issuing computer intended for implementing the method according to any one of the claims 1 16, including means that verify whether the admission code is in accordance with a predetermined format and forms an element of a set of admission codes, which set of admission codes forms a predetermined random or pseudo-random subset of all codes having said predetermined format.
- 21. An issuing computer according to claim 20, furthermore
- including means which are capable of determining the admission code by retrieving a result from a predetermined set of results and to subject said result to the inverse

of the logic operation that can be used at the moment of admission by an admission control system admission code cording to claim 18 or 19.

22. A carrier on which an admission code has been placed in accordance with the method according to any one of the claims 1 - 16.





(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 1 March 2001 (01.03.2001)

PCT

(10) International Publication Number WO 01/15089 A1

(51) International Patent Classification⁷: G07C 11/00, G07B 1/02, G06F 17/60

G07B 15/00,

(21) International Application Number: PCT/NL00/00576

(22) International Filing Date: 18 August 2000 (18.08.2000)

(25) Filing Language:

Dutch

(26) Publication Language:

English

(30) Priority Data: 1012914

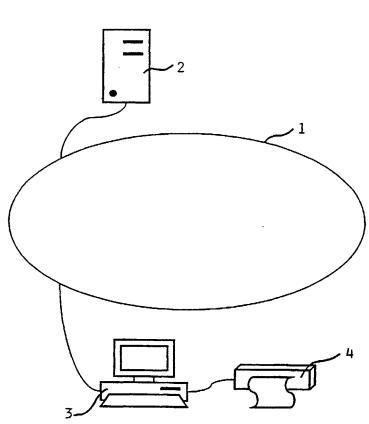
26 August 1999 (26.08.1999) NI

(71) Applicant (for all designated States except US): TICKET DIRECT B.V. [NL/NL]; Burg. Stramanweg 104, NL-1101 AA Amsterdam (NL).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): EILANDER, Johan, Peter [NL/NL]; Boeierstraat 44, NL-1435 LL Rijsenhout (NL). SMIT, Hendrikus, Martinus [NL/NL]; Korenmolen 78, NL-1622 JD Hoom (NL).
- (74) Agent: HOOIVELD, Arjen, Jan, Winfried; Sweelinckplein 1, NL-2517 GK The Hague (NL).
- (81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian

[Continued on next page]

(54) Title: ISSUING COMPUTER, ADMISSION CONTROL SYSTEM AND METHOD FOR GRANTING ADMISSION TO AN EVENT



(57) Abstract: A method for granting admission to an event, wherein an admission code is issued to a consumer via a distribution channel, which admission code is in accordance with a predetermined format and which forms part of a set of admission codes, which set of admission codes forms a predetermined random or pseudo-random subset of all codes having the predetermined format, wherein it is checked at the entrance to the event whether a code presented by a consumer is part of the set of admission codes.



WO 01/15089 A1

WO 01/15089

1/4

PCT/NL00/00576

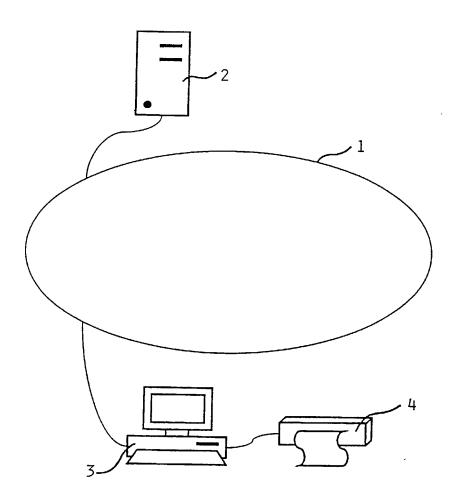


FIG. 1

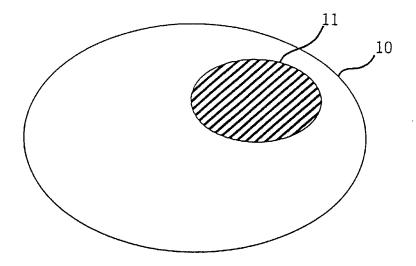


FIG. 2

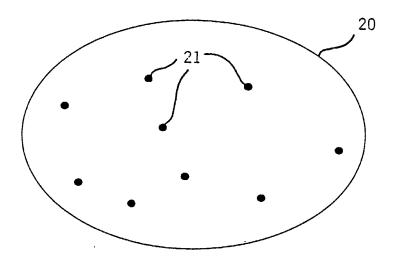


FIG. 3

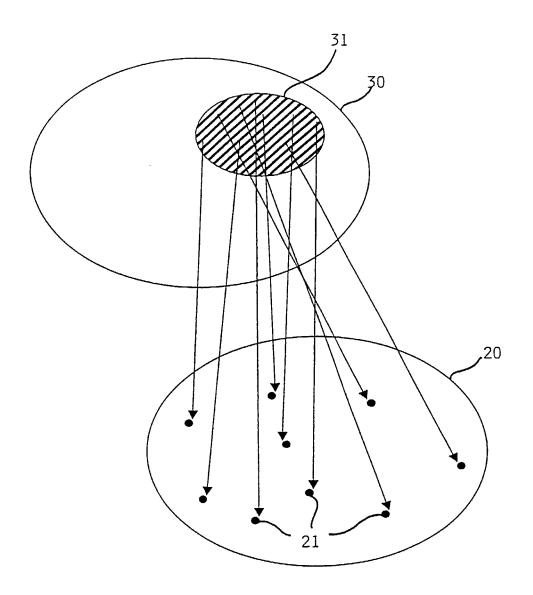


FIG. 4

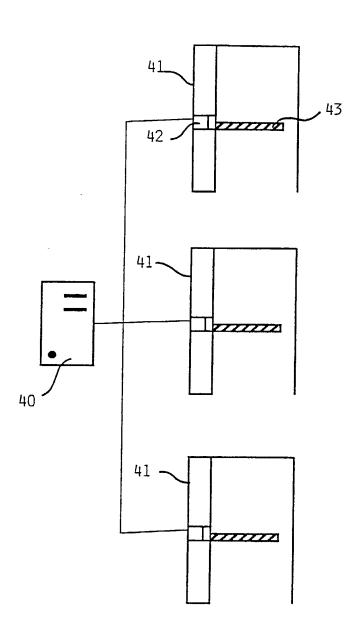


FIG. 5

Page 1 of 3

Declaration and Power of Attorney For Patent Application English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

	ing computer, ad specification of		ystem and r	method for granting	g admission t	o an event,	
	eck one)						
	is attached here	eto.					
	was filed on					as	
_	Application Ser	ial No	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1		, , , , , , , , , , , , , , , , , , , ,	as	
	~ ~						
	and was amended	on	/if applies	blo)			
	(if applicable) was filed as PCT international application						
	No. PCT/NL00	-	-	n 18 August 2	2000		
					.000		
	and was amended	under PCT Article	e 19 on	(if applica	ble)	***************************************	
appl I he fore iden	ereby claim foreitign application(dance with Title 3 ign priority benef (s) for patent or	37, Code of its under inventor' on for pate	ich is material to Federal Regulation Title 35, United so certificate listed or inventor's centry is claimed:	ons, §1.56(a) States Code, ted below an	§119 of any d have also	
Pric	or Foreign Applic	ation(s)			Priority	Claimed	
101	.2914	NL	26/0	18/1999	\mathbf{X}		
(Num	nber)	(Country)	(Day	/Month/Year Filed)	Yes	No	
					П		
(Num	nber)	(Country)	(Day	//Month/Year Filed)	Yes	No	
(Num	nber)	(Country)	(Day	//Month/Year Filed)	_ □ Yes	□ No	

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Page 2 of 3

(Application Serial No.) (Filing Date) (Status) (patented, pending, abandoned) (Application Serial No.) (Filing Date) (Status) (patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

William H. Logsdon 22,132 Paul M. Reznick 33,059 Kent E. Baldauf, Jr. 36,082 Russell D. Orkin 25.363 John W. McIlvaine 34,219 Christian E. Schuster 43,908 35.034 Thomas J. Clinton David C. Hanson 23.024 Blynn L. Shideler 40,561 36,216 Dean E. Geibel Frederick B. Ziesenheim 19 438 Julie W. Meder 42,570 43,016 Richard L. Byrne 28.498 Lester N. Fortney 38,141 Nathan J. Prepelka Kent E. Baldauf 25,826 Randall A. Notzen 36,882 Kirk M. Miles 37,891 31,<u>19</u>8 James G. Porcelli 33,757 Jessica M. Sosenko 47,102 Barbara E. Johnson Gary F. Matz 45,504

Send Correspondence to:

D'... 1 1 DE 15010 1010

Richard L. Byrne, 700 Koppers Building, 436 Seventh Avenue, Pittsburgh PA 15219-1818
Direct Telephone calls to: (name and telephone number) Richard L. Byrne (412) 471-8815
Full name of sole or first inventor Eilander, Johan Pater
Inventor's signature Date 1.03-2003
Residence Boeierstraat 44, NL-1435 LL Rijsenhout. The Netherlands
Citizenship The Netherlands
Post Office Address Boeierstraat 44, NL-1435 LL Rijsenhout, The Netherlands
Full name of second joint inventor, if any Smit, Hendrikus Martinus
Second inventor's signature Date -3-2002
Residence Korenmolen 78, NL-1622 JD Hoorn, The Netherlands
Citizenship The Netherlands
Post Office Address Korenmolen 78, NL-1622 JD Hoorn, The Netherlands

(Supply similar information and signature for third and subsequent joint inventors.)

Full name of third joint inventor, if any		Page 3 of 3
Third inventor's signature	Date	
Residence		
Citizenship		
Post Office Address	-11-2	
Full name of fourth joint inventor, if any		
Fourth inventor's signature	Date	
Residence		
Citizenship		
Post Office Address		
Full name of fifth joint inventor, if any		
Fifth inventor's signature	Date	
Residence		
Citizenship		
Post Office Address		
Full name of sixth joint inventor, if any		<u> </u>
Sixth inventor's signature	Date	
Residence		
Citizenship		
Post Office Address		